Operations and Logistics Analytics Laboratory

**OLAB**

Operations and Logistics Analytics Laboratory was founded in 2013 and has been advised by Professor Yu-Chung Tsao. The objective in the laboratory is to apply the analytics and optimization technologies to analyze and solve the operations and logistics management problems. In OLA Lab, there are several ongoing research in cooperation with professors at Shanghai Jiao Tong University.

### LAB PROJECTS

- Pricing, Inventory and Promotion Management Models for Today’s Business Environment
- Modern Logistics Systems Design for Economic and Environment Changing
- Supply Network and Coordination Contract Design under Trade Credits
- Supply Chain Network Design and Retail Planning
- Production, Warranty and System Maintenance Strategies Development under Trade Credits
- Developing Profit-Maximization Decision Models for Managing Retail Competition and Multi-echelon Supply Chain
- Ship Routing and Schedule Problems for Container Lines
- Strategy Development and Planning for Shandong High-speed Logistics
- Returnable Packaging Management in Automobile Parts Logistics
- Real-Time Management for Intelligent Production Systems

### LAB PRODUCENTS & RESEARCH

- **PhD STUDENTS & RESEARCH**
  - Yu-Thuy Linh · Ye-Van Thanh
  - Lovely Lee · Wang-Ying Chou
  - Supply network design under uncertainty
  - Sustainable supply chain management
  - Apply RFID and IoT in supply chain planning
  - Economic, environment and society harmony
  - Data-driven analytics in Ecommerce
  - Multi-criteria decision analysis
  - Key performance index for information security

- **MASTER STUDENTS & RESEARCH**
  - Alan Wang · Wendy Fan · Jim Cai
  - Jason Fan · Arke Li
  - Sea port and dry port system design
  - Sales and distribution policy in supply chains
  - RFID adoption in production and inventory models
  - Dynamic pricing for fashion and Hi-tech goods
  - Newsvendor models considering sustainability

### PROFESSIONAL AFFILIATIONS

- **Professor Yu-Chung Tsao**
  - Shanghai Jiao Tong University and the Department of Industrial Management at National Taiwan University.
  - He received the Ph.D. degree from the Institute of Industrial Management at National Central University. His research interests are in the areas of supply chain and logistics management, production and operations management, data-driven analytics, revenue management, and marketing science.

### KEY PUBLICATIONS


### CONTACT INFORMATION

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